

CURRICULUM VITAE

Karen Marie Krause

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EDUCATION

- August 2002 Doctor of Philosophy, University of Wisconsin-Madison, USA
Curriculum: Dairy Science Nutrition with distributed minor
- August 1997 Master of Science, The Royal Veterinary and Agricultural University, Copenhagen, Denmark
Curriculum: Agricultural Science (Animal Production emphasis)

POSITIONS HELD

- 2012-present Associate professor, Animal and Nutritional Science, WVU
- 2005-present Assistant professor, Animal and Nutritional Science, WVU
- 2004 - 2005 Post-doctoral Trainee, School of Veterinary Medicine, University of Wisconsin-Madison
- 2002 – 2003 Post-doctoral Research Scientist, AgResearch Limited, Grasslands Research Centre, Palmerston North, New Zealand
- 1998 – 2002 Graduate Research Assistant, Department of Dairy Science, University of Wisconsin-Madison
- 1997 - 1998 Research Assistant, Lethbridge Research Centre, Agriculture and Agri-Food Canada, Alberta, Canada

PUBLICATIONS

Journal Articles

- Y. Zang, S. Saed Samii, Z. C. Phipps, L. R. Tager, J. W. McFadden, and K. M. Krause. 2017. Comparative effects of multiple sources of rumen-protected methionine on milk production and serum amino acid levels in mid-lactation dairy cows. *The Professional Animal Scientist* 33:692-699.
- Bailey, B. L., T. C. Griggs, E. Rayburn, and **K. M. Krause**. 2014. Beef Heifer Growth and Reproductive Performance following two Levels of Pasture Allowance during the Fall Grazing Period. *J. Anim. Sci.* 92:3659-3669.
- L. R. Tager and **K. M. Krause**. 2011. Effects of essential oils on rumen fermentation, milk production, and feeding behavior in lactating dairy cows. *J. Dairy Sci.* 94:2455-2464.
- C. O. Lemley, T. A. Wilmoth, L. R. Tager, **K. M. Krause**, and M. E. Wilson. 2010. Effect of a high cornstarch diet on hepatic cytochrome P450 2C and 3A activity and progesterone half-life in dairy cows. *J. Dairy Sci.* 93:1012-1021.
- L. R. Tager and **K. M. Krause**. 2010. Effects of cinnamaldehyde, eugenol, and capsiicum on fermentation of a corn-based dairy ration in continuous culture. *Canadian J. Anim. Sci.* 90:413-420.
- C. O. Lemley, K. Vonnahme, L. R. Tager, **K. M. Krause**, and M. E. Wilson. 2010. Diet induced alterations in hepatic progesterone (P4) catabolic enzyme activity and P4 clearance rate in lactating dairy cows. *Journal of Endocrinology*, 205:233-241.
- Krause, K. M.**, D. Duyvetter, and G. R. Oetzel. 2009 Effect of a low-moisture buffer block on ruminal pH in lactating dairy cattle induced with subacute ruminal acidosis. *J. Dairy Sci.* 92: 352-364.
- Lemley, C., J. Koch, K. Blemings, **K. M. Krause** and M. Wilson. 2008. Concomitant changes in progesterone catabolic enzymes, cytochrome P450 2C and 3A, with plasma insulin concentrations in ewes supplemented with sodium acetate or sodium propionate. *Animal*, 2:8, 1223-1229.
- Krause, K. M.** and G. R. Oetzel. 2006. Understanding and preventing ruminal acidosis in dairy herds: a review. *Anim. Feed Sci. Tech.* 126: 215-236.
- Krause, K. M.** and G. R. Oetzel. 2005. Inducing Subacute Ruminal Acidosis in Lactating Dairy Cows. *J. Dairy Sci.*, 88:3633-3639.
- Krause, K. M.** and D. K. Combs. 2003. Effects of forage particle size, forage source and grain fermentability on performance and ruminal pH in midlactation cows. *J. Dairy Sci.* 86:1382-1397.

Krause, K. M., D. K. Combs, and K. A. Beauchemin. 2003. Effects of increasing levels of refined corn starch in the diet of lactating dairy cows on performance and ruminal pH. *J. Dairy Sci.* 86:1341-1353.

Krause, K. M., D. K. Combs, and K. A. Beauchemin. 2002. Effects of forage particle size and grain fermentability in midlactation cows. II. Ruminal pH and chewing activity. *J. Dairy Sci.* 85:1947-1947.

Krause, K. M., D. K. Combs, and K. A. Beauchemin. 2002. Effects of forage particle size and grain fermentability in midlactation cows. I. Milk production and diet digestibility. *J. Dairy Sci.* 85:1936-1946.

Krause, M., K. A. Beauchemin, L. M. Rode, B. I. Farr, and P. Nørgaard. 1998. Fibrolytic enzyme treatment of barley grain and source of forage in high-grain diets fed to growing cattle. *J. Anim. Sci.* 76:2912-2920.

Recent Abstracts

Y. Zang , S. Saed Samii , L. R. Tager , J. W. McFadden , and **K. M. Krause**. 2016. Comparative effects of multiple sources of rumen protected methionine on milk production and serum amino acid levels in midlactation dairy cows. *J. Dairy Sci.* 99, E-Suppl. 1. P. 775.

Bailey, B. L., T. C. Griggs, and **K. M. Krause**. 2013. Heifer growth and reproductive performance following two levels of fall pasture allocation. *Journal of Animal Science*, Vol. 91, E-Suppl. 2, p. 91.

B. L. Bailey, **K. M. Krause**, and T. C. Griggs. 2012. Beef heifer growth and reproductive performance responses to stockpiled fall forage allowance. *J. Anim. Sci.* Vol. 90, Suppl. 3. p. 332.

Griggs, T. C., B. L. Bailey and **K. M. Krause**. 2011. Cool-season mixed pasture growth responses to winter grazing severity and timing of initial spring grazing. American Society of Agronomy Annual Meeting, San Antonio, TX, October 16-19, 2011

B. L. Bailey, **K. M. Krause**, and T. C. Griggs. 2011. Influence of winter and spring pasture allowance on growth and reproductive performance on beef replacement heifers. *J. Anim. Sci.* Vol. 89, E-Suppl. 1. p. 604.

L. R. Tager and **K. M. Krause**. 2010. Effect of essential oils on rumen fermentation, milk production, and feeding behavior in lactating dairy cows. *J. Dairy Sci.* Vol. 93, E-Suppl. 1. p. 437.

L. R. Tager and **K. M. Krause**. 2010. Effect of capsicum oil on feeding behavior and milk production in lactating dairy cattle. *J. Dairy Sci.* Vol. 93, E-Suppl. 1. p. 175.

T. Griggs, B. L. Bailey. **K. M. Krause**. 2010. Productivity of Cool-Season Perennial Pastures Under Cattle Grazing Initiated at Three Stages in Spring Following Moderate and Heavy Fall Defoliation. ASA, CSSA, and SSSA 2010 International Meeting, Oct. 31- Nov. 4, Long Beach, CA.

Proceedings/Invited Presentations

Griggs, T.C., B.L. Bailey, and **K.M. Krause**. 2011. Beef heifer and pasture responses to winter grazing and hay feeding management. Proc. Appalachian Grazing Conf., Morgantown, WV, March 4-5, 2011.

K. M. Krause. 2008. To Buffer or Not? Supplemental Bicarb and Subacute Ruminant Acidosis, Southwest Nutrition and Management Conference Proceedings, Tempe, AZ, Feb. 21-22, 2008.